

**EXPRESS TERMS  
FOR  
PROPOSED BUILDING STANDARDS  
OF THE  
OFFICE OF THE STATE FIRE MARSHAL (SFM)  
REGARDING THE ADOPTION BY REFERENCE OF THE  
2005 EDITION OF THE NATIONAL ELECTRICAL CODE (NEC)  
INTO THE CALIFORNIA CODE OF REGULATIONS TITLE 24, PART 3.**

---

**Legend for Express Terms:**

1. California amendments brought forward without modification: *All such language appears in Italics.*
  2. California amendments brought forward with modification: *All such language appears in Italics, modified language is underlined.*
  3. New NEC language with new California amendment: NEC language is shown in normal Arial 9 pt. California amendments to NEC text appear underlined and in italics.
  4. New California amendment: California language appears underlined and in Italics.
  5. Repealed Text: Shown as ~~Strikeout~~.
- 

**ARTICLE 89 – Administration**

California amendments brought forward without modification:

**(Note: Adopt only those sections listed below.)**

**89.1 Title.** *The provisions contained in this Code shall be known as the “California Electrical Code,” a portion of the “California Building Standards Code,” as defined in the “California Building Standards Law” commencing with Section 18901 of the Health and Safety Code, and may be cited and referred to as the “California Electrical Code.” The unqualified words “This Code” as used herein, refer only to the California Electrical Code, and do not include any other portions of the California Building Standards Code. These provisions may also be cited as “C.E.C.” or “Part 3” within other parts of the California Building Standards Code (Title 24).*

**89.2 Purpose.** *The purpose of this Code is to provide minimum standards to safeguard life or limb, health, property and public welfare, and to protect against hazards that may arise from the use of electricity by regulating and controlling the design, construction, installation, quality of materials, location and operation of electrical equipment, wiring and systems.*

**89.3 Scope.** *The provisions of this Code and the building standards contained herein, including those standards adopted by reference without amendments, where specifically adopted by the listed agencies under their cited authority and enforced by the enforcing agency specified in Section 89.7, shall apply to the construction, alteration, moving, demolition, repair and use of all electrical equipment, wiring and systems in or on any building or structure or outdoors on any premise or property; except such electrical equipment, wiring and systems which are expressly exempted by Section 89.4.*

**89.4 Exempted from this Code.** *This Code does not cover:*

**(A)** *Installations in ships, watercraft other than floating dwelling units, railway rolling stock, aircraft, automotive vehicles, commercial coaches, mobilehomes, and recreational vehicles.*

**(B)** Installations underground in mines, mine shafts and tunnels.

**(C)** Installations of railways for generation, transformation, transmission, or distribution of power used exclusively for operation of rolling stock or installations used exclusively for signaling and communication purposes.

**(D)** Installation of communication equipment under the exclusive control of communication utilities, located outdoors or in building spaces used exclusively for such installations.

**(E)** Installations under the exclusive control of electrical utilities for the purpose of communication, or metering; or for the generation, control, transformation, transmission, and distribution of electrical energy located in buildings used exclusively by utilities for such purposes or located outdoors on property owned or leased by the utility or on public highways, streets, roads, etc., or outdoors by established rights on private property.

**Exception to (D) and (E):** In places of employment, the following shall apply: installations of conductors, equipment and associated enclosures subject to the jurisdiction of the California Public Utilities Commission, that are owned, operated and maintained by an electric, communications or electric railway utility, but not including conduit, vaults, and other like enclosures containing conductors and equipment of such a utility when located indoors or on premises not used exclusively for utility purposes, but do not apply to the utility's conductors and equipment therein.

**(F)** Installations on highways or bridges.

### **89.5 Non-Building Standards, Orders and Regulations.**

**(A)** Requirements contained in the National Electrical Code (NEC), or in any other referenced code, document, or standard, which are not building standards as defined in Section 18909 of the Health and Safety Code, shall not be construed as a part of the provisions of this Code.

**(B)** For the applicability of regulations, safety and other orders, and standards, which relate to the administration, enforcement, maintenance, operation and similar non-building standards, see other titles of the California Code of Regulations.

### **89.6 Order of Precedence and Use.**

**(A)** In the event of any difference between the provisions of this Code and the National Electrical Code (NEC), or between this Code and the provisions of any other referenced code, document or standard, the text of this Code shall govern. Where a specific provision varies from a general provision, the specific provisions shall apply.

**(B)** If a section of this Code makes a cross-reference to another section or table in the National Electrical Code (NEC), such cross-referencing shall be interpreted to mean that which is shown in the NEC unless the referenced section or table has been amended or modified in this Code for the particular enforcing agency.

**(C)** If a section in the National Electrical Code (NEC) makes a cross-reference to another section or table in the NEC, such cross-referencing shall be interpreted to mean that which is shown in the NEC unless the referenced section or table has been amended or modified in this Code for the particular enforcing agency.

**(D)** When adopted by a State agency, and approved by the Commission, the text of amended provisions contained in this Code shall take precedence over the corresponding provisions of the National Electrical Code (NEC).

### **89.7. Application.**

#### **89.7.8. SFM – Office of the State Fire Marshal**

**Application** - Any building or structure used or intended for use as an asylum, jail, mental hospital, hospital, sanitarium, home for the aged, children's nursery, children's home, school or any similar occupancy of any capacity.

Any theater, dancehall, skating rink, auditorium, assembly hall, meeting hall, nightclub, fair building, or similar place of assemblage where 50 or more persons may gather together in a building, room or structure for the purpose of amusement, entertainment, instruction, deliberation, worship, drinking or dining, awaiting transportation, or education.

Authority Cited-Health and Safety Code Section 13143.

Reference-Health and Safety Code Section 13143.

**Small Family Day-care Homes**

Authority Cited-Health and Safety Code Sections 1597.45, 1597.54, 13143 and 17921.  
Reference-Health and Safety Code Section 13143.

**Large Family Day-care Homes**

Authority Cited-Health and Safety Code Sections 1597.46, 1597.54 and 17921.  
Reference-Health and Safety Code Section 13143.

**Residential Facilities and Residential Facilities for the Elderly**

Authority Cited-Health and Safety Code Section 13113 and 13131.5  
Reference-Health and Safety Code Section 13143.

**Any state institution or other state-owned or state-occupied building.**

Authority Cited-Health and Safety Code Section 13108.  
Reference-Health and Safety Code Section 13143.

**High-rise Structures**

Authority Cited-Health and Safety Code Section 13211.  
Reference-Health and Safety Code Section 13143.

**Motion Picture Production Studios**

Authority Cited-Health and Safety Code Section 13143.1.  
Reference-Health and Safety Code Section 13143.

**Any state institution or other state-owned or state-occupied building.**

Authority Cited-Health and Safety Code Section 13108.  
Reference-Health and Safety Code Section 13143.

**High-rise Structures**

Authority Cited-Health and Safety Code Section 13211.  
Reference-Health and Safety Code Section 13143.

**Motion Picture Production Studios**

Authority Cited-Health and Safety Code Section 13143.1.  
Reference-Health and Safety Code Section 13143.

**Organized Camps**

Authority Cited-Health and Safety Code Section 18897.3.  
Reference-Health and Safety Code Section 13143.

All hotels, motels, lodging houses, apartment houses and dwellings, including congregate residences and buildings and structures accessory thereto.

Multiple-story structures existing on January 1, 1975, let for human habitation, including and limited to, hotels, motels, apartment houses, less than 75 feet (22 860 mm) above the lowest floor level having building access, wherein rooms used for sleeping are let above the ground floor.

Authority Cited-Health and Safety Code Sections 13143.2 and 17921.  
Reference-Health and Safety Code Section 13143.

Certified family-care homes, out-of-home placement facilities, halfway houses, drug and/or alcohol rehabilitation facilities and any building or structure used or intended for use as a home or institution for the housing of any person of any age when such person is referred to or placed within such home or institution for protective social care and supervision services by any governmental agency.

Authority Cited-Health and Safety Code Section 13143 and 13143.6.  
Reference-Health and Safety Code Section 13143.6.

**Tents, awnings or other fabric enclosures used in connection with any occupancy.**

Authority Cited-Health and Safety Code Section 13116.  
Reference-Health and Safety Code Section 13116.

**Fire alarm devices, equipment and systems, in connection with any occupancy.**

Authority Cited-Health and Safety Code Sections 13114 and 13143.

Reference-Health and Safety Code Section 13114.

**Hazardous materials.**

Authority Cited-Health and Safety Code Sections 13143.9.

Reference-Health and Safety Code Section 13143.9.

**Flammable and combustible liquids.**

Authority Cited-Health and Safety Code Sections 13143.6.

Reference-Health and Safety Code Section 13143.6.

**89.8 Adopting Agency.** An "Adopting agency" is a State agency, excluding an agency in the judicial or legislative department of the State Government, which is responsible for the administration of a program and which as promulgated, adopted and submitted to the Commission for its approval proposed building standards for such programs. "Adopting agency" may include boards, commissions, committees, departments, divisions, officers, and other subdivisions of State Government.

**89.9. Format.** The California Electrical Code, a part of the California Building Standards Code, adopts the National Electrical Code (NEC) by reference on an article-by-article basis. Amendments or additions to the provisions of the NEC by each adopting agency are adopted on a section by section or subsection by subsection basis, and follow the NEC format using the same titles, bold face headings and general text arrangement, except where the commission has approved a format variance.

**89.10. Validity.** If any chapter, article, section, subsection, paragraph, sentence, clause, or phrase of this Code is for any reason held to be unconstitutional, contrary to statute, exceeding the authority of the State as stipulated by statutes, or otherwise inoperative, such decisions shall not affect the validity of the remaining portions of this Code.

**89.11. Standard Reference Documents.**

**(A)** The codes, publications, and standards adopted in the Matrix Adoption or referred to in this Code, including other codes, publications, and standards referred to therein, are by title and date of publication, hereby adopted as standard reference documents of this code.

**(B)** Such reference to other documents shall be made in the form of either an Internal citation within the text or a fine print note (utilizing a smaller typographical alphabet letter size), and shall be a specific edition of the referenced document. Internal citations appearing within the text of a building standard are enforceable, and each citation must be checked for accuracy and application. Fine print notes, which appear beneath the applicable text of the building standard or Code section are explanatory of permissive and are not enforceable.

**Notation**

**Authority:** Health and Safety Code Sections 13143, 17921, 18949

**References:** Health and Safety Code Sections 13143

**ARTICLE 90**

**INTRODUCTION**

**(Note: This Article is not adopted.)**

**Notation**

**Authority:** Health and Safety Code Sections 13143, 17921, 18949

**References:** Health and Safety Code Sections 13143

**CHAPTER 1 – General - Articles 100 and 110**

The SFM is proposing the adoption by reference the entire Article 100 – Definitions without SFM amendments.

The SFM is proposing the adoption by reference the entire Article 110-Requirements for Electrical Installations without SFM amendments.

**Notation**

**Authority:** Health and Safety Code Sections 13143, 17921, 18949

**References:** Health and Safety Code Sections 13143

**CHAPTER 2 — Wiring and Protection - Articles 225 and 250**

The SFM is proposing the adoption by reference of only those sections listed below from Article 225, without amendment.

**225.19(E) Zone for Fire Ladders.**

The SFM is proposing the adoption by reference of only those sections listed below from Article 250-Grounding, without amendment.

**250.112(I) Power-Limited Remote-Control, Signaling, and Fire Alarm Circuits.**

**Notation**

**Authority:** Health and Safety Code Sections 13143, 17921, 18949

**References:** Health and Safety Code Sections 13143

**CHAPTER 3 — Wiring Methods and Materials, Articles 300, 314, 320, 330, 332, 334, and 362**

The SFM is proposing the adoption by reference of only those sections listed below from Article 300-Wiring Methods, without amendment.

**300.21 Spread of Fire or Products of Combustion.**

**300.22 Wiring in Ducts, Plenums, and Other Air-Handling Spaces.**

The SFM is proposing the adoption by reference of only those sections listed below from Article 314-Outlet, Device, Pull and Junction Boxes, Conduit Bodies and Fittings, without amendment.

**314.15 Damp, Wet, or Hazardous (Classified Locations).**

The SFM is proposing the adoption by reference of only those sections listed below from Article 320-Armored Cable: Type AC, without amendment.

**320.2 Definition.**

The SFM is proposing the adoption by reference of only those sections listed below from Article 330-Metal-Clad Cable: Type MC, without amendment.

**330.2 Definition.**

**330.10 Uses Permitted.**

**330.12 Uses Not Permitted.**

The SFM is proposing the adoption by reference of only those sections listed below from Article 332-Mineral-Insulated, Metal-Sheathed Cable: Type MI, without amendment.

**332.2 Definition.**

**332.10 Uses Permitted.**

**332.12 Uses Not Permitted.**

The SFM is proposing the adoption by reference of only those sections listed below from Article 334-Nonmetallic Sheathed Cable Types NM, NMC, and NMS, without amendment.

**334.10(A) Type NM.**  
**334.10(B) Type NMC.**  
**334.12 Uses Not Permitted**

The SFM is proposing the adoption by reference of only those sections listed below from Article 362-Electrical Nonmetallic Tubing, without amendment.

**362.2 Definition.**  
**362.10 Uses Permitted.**  
**362.12 Uses Not Permitted.**

#### **Notation**

**Authority: Health and Safety Code Sections 13143, 17921, 18949**

**References: Health and Safety Code Sections 13143**

#### **CHAPTER 4 — Equipment for General Use, Articles 400, 410, 422, and 450.**

The SFM is proposing the adoption by reference of only those sections listed below from Article 400-Flexible Cords and Cables, without amendment.

**400.6 Markings.**  
**400.7 Uses Permitted.**  
**400.8 Uses Not Permitted.**  
**400.9 Splices.**  
**400.10 Pull at Joints and Terminals.**  
**400.12 Minimum Size.**  
**400.13 Overcurrent Protection.**  
**400.14 Protection from Damage.**  
**400.30 Scope.**  
**400.31 Construction.**  
**400.32 Shielding.**  
**400.33 Grounding.**  
**400.34 Minimum Bending Radii.**  
**400.35 Fittings.**  
**400.36 Splices and Terminations.**

The SFM is proposing the adoption by reference of only those sections listed below from Article 410-Lighting Fixtures, Lamp holders, Lamps, and Receptacles, without amendment.

**410.5 Fixtures Near Combustible Material.**  
**410.6 Fixtures Over Combustible Material.**  
**410.8(D) Location.**  
**410.12 Outlet Boxes to Be Covered.**  
**410.13 Covering of Combustible Material at Outlet Boxes.**  
**410.86(C) Adjacent to Combustible Materials.**

The SFM is proposing the adoption by reference of only those sections listed below from Article 422-Appliances, without amendment.

**422.10 Branch-Circuit Rating.**

**422.11 Overcurrent Protection.**  
**422.12 Central Heating Equipment.**  
**422.16 Flexible Cords.**

The SFM is proposing the adoption by reference of only those sections listed below from Article 450-Transformers and Transformer Vaults, without amendment.

**450.13 Accessibility.**  
**450.21 Dry-Type Transformers Installed Indoors.**  
**450.23 Less-Flammable Liquid-Insulated Transformers.**  
**450.24 Nonflammable Fluid Insulated Transformers.**  
**450.26 Oil-Insulated Transformers Installed Indoors.**  
**450.27 Oil-Insulated Transformers Installed Outdoors.**  
**450.41 Location.**  
**450.48 Storage in Vaults.**

#### **Notation**

**Authority:** Health and Safety Code Sections 13143, 17921, 18949

**References:** Health and Safety Code Sections 13143

#### **CHAPTER 5 — SPECIAL OCCUPANCIES, Articles 500, 501, 502, 503 and 527.**

The SFM is proposing the adoption by reference the entire Article 500-Hazardous (Classified) Locations, Classes I, II, and III, Divisions 1 and 2, without amendment.

The SFM is proposing the adoption by reference the entire Article 501-Class I Locations, without amendment.

The SFM is proposing the adoption by reference the entire Article 502-Class II Locations, without amendment.

The SFM is proposing the adoption by reference the entire Article 503-Class III Locations, without amendment.

The SFM is proposing the adoption by reference of entire Article 527-Temporary Wiring, as amended.

The SFM is proposing to maintain the existing SFM amendment of the 2004 CEC Section 527.3(C) into Section 590.3(C) of the 2007 CEC (2006 NEC) as shown below with modification.

**527.3 (C) 590.3(C) Emergencies and Tests.** Temporary electrical power and lighting installations shall be permitted during emergencies and for tests, experiments, and developmental work ~~[For SFM] as approved by the authority having jurisdiction.~~

For applications listed in section 89.7.8 regulated by the Office of the State Fire Marshal, Temporary electrical power and lighting installations shall be permitted during emergencies and for tests, experiments, and developmental work as approved by the authority having jurisdiction.

#### **CHAPTER 6 — SPECIAL EQUIPMENT, Article 625**

The SFM is proposing the adoption by reference of the entire Article 625-Electric Vehicle Charging System Equipment as amended.

The SFM is proposing to maintain the existing SFM amendment of the 2004 CEC Section 625-29(E) as shown below.

**625.29(E) Ventilation Required.** For applications listed in section 89.7.8 regulated by the Office of the State Fire Marshal, ~~Where~~ the electric vehicle supply equipment listed or labeled as suitable for charging electric vehicles that require ventilation for indoor charging and marked in accordance with Section 625(C), mechanical ventilation, such as fan, shall be provided as specified in the California Building Code.

#### **Notation**

**Authority: Health and Safety Code Sections 13143, 17921, 18949**  
**References: Health and Safety Code Sections 13143**

## **CHAPTER 7 – SPECIAL CONDITIONS, Articles 700, 701, 702, 725, and 760.**

The SFM is proposing the adoption by reference of the entire Article 700-Emergency Systems.

The SFM is proposing to maintain the existing SFM amendments of 2004 CEC Section 700.12(B)(2) as shown below.

**700.12(B)(2) Generator Set.** Where internal combustion engines are used as the prime mover, an on-site fuel supply shall be provided with an on-premise fuel supply sufficient for not less than 2 hours full-demanded operation of the system. Where power is needed for the operation of the fuel transfer pumps to deliver fuel to a generator set day tank, this pump shall be connected to the emergency power system.

*[Exceptions for ~~SFM~~ applications listed in section 89.7.8 regulated by the Office of the State Fire Marshal.]*

*Exception No. 1: The on-premise fuel supply shall be sufficient for not less than 24 hours full-demand operation in acute general care hospitals and correctional treatment centers that provide optional services. For acute care hospital facilities required to meet NPC-5, the on-premise fuel supply shall be sufficient for no less than 72 hours full-demand operations.*

*Exception No. 2: The on-premise fuel supply shall be sufficient for not less than 6 hours full-demand operation in the following health facilities of seven or more beds: correctional treatment centers that provide only basic services, acute psychiatric hospitals, intermediate care facilities, and skilled nursing facilities.*

*Exception No. 3: The on-premise fuel supply shall be sufficient for not less than 4 hours full-demand operation in ambulatory surgical clinics.*

The SFM is proposing the adoption by reference the entire Article 701-Legally Required Standby Systems, without amendment.

The SFM is proposing the adoption by reference the entire Article 702-Optional Standby Systems, without amendment.

The SFM is proposing the adoption by reference the entire Article 725-Class 1, Class 2, and Class 3 Remote-Control, Signaling and Power-Limited Circuits, without amendments.

The SFM is proposing the adoption by reference the entire Article 760-Fire Alarm Systems.

The SFM is proposing to maintain the existing SFM amendment of 2004 CEC Section 760.1.1 as shown below with modification.

### **760.1.1 ~~(For SFM)~~ Equipment and Systems.**

*Fire alarm equipment and systems required to be installed in any occupancy within the scope of these regulations shall conform to the applicable performance and construction standards specified in NFPA 72-~~1999~~ 2002.*

## **Notation**

**Authority: Health and Safety Code Sections 13143, 17921, 18949**  
**References: Health and Safety Code Sections 13143**